

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/26956

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04B 10/00
 US CL : 398/116

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 398/116, 115, 141

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,497,465 A (CHIN et al.) 05 March 1996 (05.03.1996), Figures 1 and 29.	1-9, 11
Y	US 6,249,363 B1 (ARITA et al.) 19 June 2001 (19.06.2001), Figure 1.	1-9, 11
Y	US 6,016,211 A (Szymanski et al.) 18 January 2000 (18.01.2000), Figure 33.	10
Y	US 6,163,642 A (HUPPENTHAL) 19 December 2000 (19.12.2000), Figure 8.	10
A	US 4,979,138 A (ARRATHOON) 18 December 1990 (18.12.1990), Figure 12.	1-11

 Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:		
"A"	document defining the general state of the art which is not considered to be of particular relevance	"T"
"E"	earlier application or patent published on or after the international filing date	"X"
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"O"	document referring to an oral disclosure, use, exhibition or other means	"&"
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		document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
		document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
		document member of the same patent family

Date of the actual completion of the international search

07 January 2004 (07.01.2004)

Date of mailing of the international search report

23 JAN 2004

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